



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,974	12/17/2001	Addepalli Sateesh Kumar	RNI-001-3P	9459

7590 09/20/2005

LEGAL DEPARTMENT
RAZA MICROELECTRONICS, INC.
18920 FORGE DRIVE
CUPERTINO, CA 95014

EXAMINER

NGUYEN, BINH QUOC

ART UNIT	PAPER NUMBER
----------	--------------

2664

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/023,974	KUMAR ET AL.	
	Examiner	Art Unit	
	Binh Q. Nguyen	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21, and 31-40 is/are rejected.
- 7) ☒ Claim(s) 22-30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-21, and 31-40** are rejected under 35 U.S.C. 102(e) as being anticipated by *Castellano* the U.S. Patent. No.: (6,674,750).

Regarding claims 1, and 31. A method and system of combining TDM data and data packets (*see Fig. 3, and 6A-6B*) comprising:

receiving a plurality of TDM data columns (*see col. 9, lines 1-16, and col. 13, lines 37-44, and for "columns means time slots" col. 15, lines 45-55*);

receiving a plurality of data packets (*see col. 9, lines 1-16*),

transforming a first subset of the data packets into one or more TDM packet columns (*see col. 13, lines 37-62*); and

combining the TDM packet columns with a first subset of the TDM data columns to form a data payload of an outgoing TDM data frame (*see col. 15, line 45 -to- col. 16, line 35*).

Regarding claims 2, and 32. The method and system of claim 1, wherein a TDM packet column includes a high priority data packet and a low priority data packet (*see col. 12, lines 40-58*).

Regarding claims 3, and 33. The method and system of claim 1, wherein the receiving a plurality of TDM data columns (*for “columns means time slots” col. 15, lines 45-55*) further comprises receiving an incoming TDM data frame containing a second subset of TDM data columns (*see col. 15, line 45 -to- col. 16, line 17, time slots mean second subset of TDM data columns*).

Regarding claims 4, and 34. The method and system of claim 3, wherein the receiving a plurality of TDM data columns further comprises receiving a third subset of TDM data columns from a TDM user interface (*see col. 15, line 45 -to- col. 16, line 17, time slots mean third subset of TDM data columns*).

Regarding claims 5, and 35. The method and system of claim 3, further comprising separating the second subset of TDM data columns into a plurality of DROP TDM data columns (*See col. 3, lines 29-38 for “Forming the payload and header components of the packet”, and See col. 2, lines 27-66, and col. 13, lines 23-36*) and a plurality of THROUGH TDM data columns (*See col. 4, lines 12-38, (As application’s specification defined at paragraph [0048]: “DROP payload refers to payload destined to users of multi-medium network node 700a that are coupled to Packet/TDM cross connect unit 740 through TDM user interface 430 or packet user interface 730. THROUGH payload refers to payload that is destined for other network nodes and is thus sent through multi-medium interface 420”*)).

Art Unit: 2664

Regarding claims 6, and 36. The method and system of claim 4, further comprising sending the DROP TDM data columns to a TDM user interface (*See col. 3, lines 29-38 for “Forming the payload and header components of the packet”, and See col. 2, lines 27-66, and col. 13, lines 23-36*).

Regarding claims 7, and 37. The method and system of claim 5, wherein the outgoing TDM data frame contains the through TDM data columns (*See col. 8, lines 25-50, for “columns means time slots, col. 15, lines 45-55*).

Regarding claims 8, and 38. The method and system of claim 6, wherein the outgoing TDM data frame contains a third subset of TDM data columns from a TDM user interface (*see col. 15, line 45 -to- col. 16, line 17, time slots mean third subset of TDM data columns, and see Fig. 6B, Frame 1-6, Time Slot 3*).

Regarding claims 9, and 39. The method and system of claim 1, wherein the receiving a plurality of data packets further comprises receiving an incoming TDM data frame containing a second subset of data packets (*see col. 15, line 45 -to- col. 16, line 17, time slots mean second subset of data packets, and see Fig. 6B, Frame 1-6, Time Slot 2*).

Regarding claims 10, and 40. The method and system of claim 9, wherein the receiving a plurality of data packets further comprises receiving a third subset of data packets from a packet user interface (*see col. 15, line 45 -to- col. 16, line 17, and col. 4, line 39-65, and see Fig. 6B, Frame 1-6, Time Slot 5*).

Regarding claim 11. The method of claim 9, further comprising separating the second subset of data packets as DROP data packets (*see col. 2, lines 27-66, and col. 13, lines 23-36*) and THROUGH data packets (*See col. 4, lines 12-38*).

Regarding claim 12. The method of claim 11, wherein the DROP data packets are sent to a packet user interface (*see col. 2, lines 27-66, and col. 13, lines 23-36*).

Regarding claim 13. The method of claim 11, wherein outgoing TDM data frame contains the THROUGH data packets (*see col. 4, lines 12-38*).

Regarding claim 14. The method of claim 13, wherein the outgoing TDM data frame contains a third subset of data packets from a packet user interface (*see col. 15, line 45 -to- col. 16, line 17, time slots mean third subset of TDM data columns, and see Fig. 6B, Frame 1-6, Time Slot 6*).

Regarding claim 15. The method of claim 1, wherein the TDM packet columns and the TDM data columns are interleaved within the payload (*see Fig. 6A-6B, Frame 1-6, Time Slot 1-8*).

Regarding claim 16. A method of combining TDM data and data packets (*see Fig. 3, and 6A-6B*) comprising:
receiving a first plurality of TDM data columns (*see col. 9, lines 1-16, and col. 13, lines 37-44, and for "columns means time slots" col. 15, lines 45-55*);

Art Unit: 2664

receiving a first plurality of data packets (*see col. 9, lines 1-16*),
transforming a first subset of the first plurality of data packets into a first group of TDM packet columns (*see col. 13, lines 37-62*);
combining the first group of TDM packet columns with a first subset of the first plurality of TDM data columns to form a first data payload of a first TDM data frame (*see col. 15, line 45 - to- col. 16, line 35*);
receiving a second plurality of TDM data columns (*see col. 9, lines 1-16, and col. 13, lines 37-44, and col. 15, lines 45-55 "time slots means second plurality of TDM data columns"*);
receiving a second plurality of data packets (*see col. 9, lines 1-16, receive TDM data means second plurality of data packets*);
transforming a first subset of the second plurality of data packets into a second group of TDM packet columns (*see col. 13, lines 37-62, and Fig. 6A-6B*); and
combining the second group of TDM packet columns with a first subset of the second plurality of TDM data columns to form a second data payload of a second TDM data frame (*see col. 15, line 45 -to- col. 16, line 35, and Fig. 6A-6B*).

Regarding claim 17. The method of claim 16, wherein the first payload is larger than the second payload (*see col. 3, lines 12-60*).

Regarding claim 18. The method of claim 16, wherein the first subset of the first plurality of TDM data columns is larger than the first subset of the second plurality of TDM data columns (*see col. 3, lines 12-60*).

Regarding claim 19. The method of claim 16, wherein the first group of TDM packet columns is larger than the second group of TDM packet columns (*see col. 3, lines 12-60, col. 5, lines 1-7*).

Regarding claim 20. The method of claim 16, wherein a TDM packet column includes a high priority data packet and a low priority data packet (*see col. 12, lines 40-58*).

Regarding claim 21. A network node (*see Fig. 3, col. 1, line 22-46, and col. 9, lines 18-32* "network access unit"(NAU) or "network access switch" (NAS) means a network node) comprising:
a first network interface (*see col. 9, lines 18-32, Fig. 3 item "422-1" or item "417-1" means a first network interface*); and
a TDM/Packet cross connect switch coupled to the first network interface (*see col. 9, lines 18-43, Fig. 3 item "415-1" means a TDM/Packet cross connect switch*);
a TDM user interface coupled to the TDM/Packet cross connect switch (*see col. 9, lines 18-43, Fig. 4B item Packet/TDM Interface "510" means a TDM user interface*); and
a packet user interface coupled to the TDM/Packet cross connect switch (*see col. 9, lines 18-43, Fig. 4B item Packet/TDM Interface "510" also means a packet user interface*).

Allowable Subject Matter

3. **Claims 22-30** are objected to as being dependent upon a rejected base claim, but would be allowable if rewrite in independent form including all of the limitation of the base claim and any intervening claims.

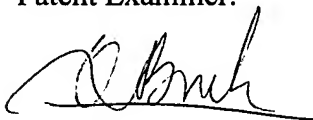
Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh Q. Nguyen whose telephone number is 571-272-8563. The examiner can normally be reached on M-F: 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner:



Binh Q Nguyen

09/12/2005



WELLINGTON CHIN
VISORY PATENT EXAMINER